

Docket No. SA-534

Exhibit No. 2-DP

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

CPUC'S 2005 PG&E INTEGRITY MANAGEMENT
AUDIT MEETING SUMMARY

(5 Pages)

**Pacific Gas and Electric Company
Integrity Management Inspection**

Week 1, 2 & 3

Exit Meeting Summary

(These observations are preliminary and are subject to further evaluation and modification)

General Observations

1. The CPUC team appreciates the openness and candor of the Pacific Gas and Electric Company team. This approach allowed our team to achieve significant progress toward completing this IM inspection. We also wish to thank you for your generous hospitality.
2. The PG&E IM team had already recognized areas where improvements were to be made to the IM program by virtue of internal audit. Some of these planned changes will address observations noted below. These improvements represent a strong commitment by PG&E to IM. We encourage PG&E to pursue these improvements.
3. Various IM processes and overall documentation need to be more robust. For example, PG&E has completed various evaluations to support IM decisions. However, many of these evaluations were not documented so that a history of decision-making activities was not preserved. Most notably was the use of buffers that appear to be inadequate according to the two locations the inspection team observed.

HCA Identification

1. The process regarding how the operator implements HCA identification (i.e., Method 1 or Method 2) needs to be more detailed. Also, it was unclear how the buffer to PICs was applied in a consistent manner or that the buffer was adequately verified for accuracy in its application. [A.01.a]
2. The Method used to identify HCAs for specific segments needs to be documented. [A.01.a] ***Resolved during week 2.***
3. With respect to identifying new HCAs, the process document is not detailed enough to ensure that field personnel know how to perform HCA determinations in a consistent manner to produce accurate and repeatable results. [A.01.a]
4. The process for the promptness and consistent utilization of new pipeline centerline data needs to be formalized. [A.01.a]
5. Some areas should have been identified as HCA affecting segments prior to December 17, 2004, but were not by the rule deadline for example **pipeline 1518-01 was up-rated in 10/03, but was not determined to affect an HCA until 10/17/05 and facility piping.** [A.01.d]
6. Documentation confirming the BTU content of the gas being transported needs to be presented to verify that the correct PIR formulae is being utilized. [A.02.a] ***Resolved during week 2.***

Threat Identification, Data Integration and Risk Assessment

1. PG&E needs to more clearly document the justification for eliminating potential threats. For example, the threat identification evaluation and risk analysis did not document the elimination of SCC and internal corrosion threats for certain segments where it appeared to exist. [C.01.d]
2. There is no detailed procedure in place to ensure consistent collection and analysis of the data on an annual basis. [C.02.a]

3. It does not appear as though PG&E used all of the data available to it during the data integration phase. For example, all A-Forms and previous pig runs did not appear to have been utilized. [C.02.b&c]
4. There is no requirement in the IMP to allow for new information to be integrated in a timely and effective manner. [C.02.e]
5. Due to the fact that certain areas (facilities) known to be within HCAs have not been identified as HCA affecting segments almost one year from the effective date of the rule indicates that inadequate resources are being assigned to the IM program. CPUC strongly recommends PG&E evaluate this situation and address it promptly including specific time frames assigned for data integration activities, i.e. mapping. [C.03.e]

Baseline Assessment Plan

1. A more detailed process that generates a thorough technical justification as to why certain assessment technologies are chosen to assess threats needs to be developed. [B.01.a]

ECDA Process

1. The number of digs is not followed per the FAQ as laid out. Repriorization is taking place during the post assessment phase the first time through even though the rule requires this not to be done. [D.01.b]
2. Section 4.4.4 page 30 in RMP-09 does not require an ongoing requirement to conduct the Indirect Inspection tools within a defined time. [D.01.c]
3. The operator does not classify different Regions for where there are different coating types or CP system changes. Reference Table 3.3.1. Guided Wave has been listed as an Assessment tool; however, there is not justification or explanation as to when or where it is to be used. [D.02.a]
4. The procedure notes that the analysis process is in the framework status; however, the operator notes that they are well outside the framework status at this time. Also, the operator notes that their procedure is mature at this time. See Page 21, Section 3.7.1 in RMP-09. [D.02.b]
5. The procedure on page 22 of 113 in Section 3.8.3 of RMP-09 requires Form D, but not on a consistent basis. No requirement for basis of tool section required on Form D or within the procedure. [D.02.c]
6. Regions are not declared when coating types change as required in the NACE document. See page 24 of 113 in Section 3.9 of RMP-09. Operator does not use soil changes/Types as a way to determine ECDA region changes. [D.02.d]
7. Section 4.3.1.1 on page 27 of 113 in RMP-09, - Rev 5 states that the operator shall consider items which must be done at a minimum and the operator agreed that this must be changed. Section (i) does require surveys to be extended. Operator has set points every fifty feet for data alignment in the rural areas and 10 feet in the urban areas. Operator has chosen to install a test coupon near here they have had an indirect inspection indication in lieu of excavation or other methods to examine the location. [D.03.a]
8. No requirement to reduce spacing when defects are suspected as is required by the standard. Operator has a 100 mV shift polarization in the procedure for classifying indications which is inconsistent with the standard. See Table 4.6.1 on page 32 of 113 of the RMP-09 Rev. 5. [D.03.b]
9. Operator does not dig all of their severe indications during the first time ECDA process as noted in Section 5.3.3 of the RMP-09 Rev5 as required in the NACE RP0502-2002, Section 5.10. [D.4.a]

10. Suggested that the technical justification be added as a requirement when equivalent remaining strength calculations are done. The remaining life calculation needs to be changed to say that the worst corroded location found is to be assumed to remain in the pipeline upon which the calculations are based unless a Root Cause analysis is performed to determine that location was unique. Reference section 6.2.1 in RMP-09 Rev.5. [D.04.b]
11. Section 5.11 on page 52 of 113 in RMP-09 conflicts with the NACE document in not requiring any reduction in prioritization of indications the first time through the process. [D.04.f]
12. Operator uses a different remaining life calculation than the one referenced in the rule. [D.05.a]

Remediation

1. Reference Section 2.5 and Section 5.2 in RMP-11 on page 16 in Rev 01. Added language is needed to show compliance with the rule. [E.01.a]
2. There have been multiple locations where the operator has identified locations where the wall loss is greater than 80%; however, the operator has chosen not to repair the condition as if it were an immediate condition. Review pipeline 131. Reference section 5.5.1 and table 5.5.1 where the operator shows that they want to use Pf calculation for a wall loss over 80% and there is no valid calculation for this condition. [E.01.c]
3. Section 5.3 and 5.3.3.2 talks about not calling out that the 80% wall loss anomaly is an immediate condition. This needs to be revised to clearly define this condition. Section 5.3 suggests that the operator has five days in which to reduce pressure; however, the PHMSA's position would be to have it read as if the operator cannot exceed five days. More clearly define that the short list is Form F. [E.02.a]
4. Item 6 under E.2.b is not covered in table 5.5.1 on page 18 in RMP-11. [E.02.b]
5. This section is absent from the plan and needs to be added to show that monitored conditions will be reviewed during subsequent assessments. [E.02.c]
6. On line L-132 near the San Francisco Water District supply line where there was an anomaly under the water line and PG&E decided not to excavate this location. PG&E decided to install a corrosion coupon to give the on / off CP readings and Coupon to Soil reading near the pipe. No further attempts were made to evaluate the actual indirect inspection readings. No technical justification provided. [E.04.b]
7. Operator create a new category not included in the rule as Scheduled Other where there is 80% wall loss due to corrosion, but this anomaly is not classified as an immediate repair condition. See Procedure RMP-11, Section 5.5.1 on page 18 of Rev. 1 dated 10-13-05. [E.04.d]
8. Scheduled Other category is not consistent with ASME B31.8S or Part 192. [E.04.e]
9. Other than the "Scheduled Other" criteria all other anomalies have been repaired according to the repair timeframes. [E.04.g]

Continual Evaluation and Assessment

1. See Section RMP-06 Rev.1 page 51 – Section 7.5. This needs to be updated to reflect actual sections in Section 4 or the BAP to follow. [F.02.b]
2. No corrosion growth rate used to establish the reassessment interval. Reference RMP-06, Rev.1 Section 7. [F.04.a]
3. This section (RMP-06 Rev.1, Section 16 on page 84) of the manual is in a frame work status. Operator has the procedures in place, but just does not have them referenced specifically. Inspection team (Sunil) reviewed the hydrostatic testing (A-37), blowdown (A-38) and coating removal procedures. [F.07.a]

Preventive and Mitigative Measures

1. No process to identify the highest threat for each HCA segment so that appropriate P&M activities are identified. [H.01.a]
2. Reference page 48 in RMP-06 Rev. 1 in Section 7.2. These areas in Section 9 and Section 7 are not clearly organized to allow a reasonable person to follow the process in a consistent manner. [H.01.b]
3. Person conducting the Root Cause analysis for the company is not trained to conduct these analyses in a structure or industry recognized process. PG&E admitted during the inspection of being self trained to conduct these Root Cause Analyses for Third Party Damage. [H.02.a]
4. Reference Section 9.9 on page 59 of RMP-06 Rev. 1 dated 10-14-05. The IMP in this area needs to be better defined and clarified so that confusion is minimized. For example, Section 9.9 talks about pipelines operating at <30 % SMYS in Non-HCA areas, but does not discuss pipelines operating at <30 % SMYS within an HCA. Also, note that boring activities require stand-by during work. [H.03.a&b]
5. No clear section to address this issue for cover and non-covered segments. Reference Section 9 on page 56 of RMP-06. [H.06.a]
6. No process was developed (Reference page 60) in Section 9 in RMP-06 Rev. 1 dated 10-14-05. The operator proposed on the bottom of page 60 to wait until 12/06 to develop this process and the inspection team disagreed with waiting that long. Also, operator should be trying to take credit for areas where these types of valves already exist. [H.07.a]
7. No process in place or frame work available for review to demonstrate compliance in this area. [H.08.a,b&c]

Performance Measures

1. Operator does not report corrosion greater than 80 % thru wall as immediate repairs. Operator performs the RSTRENG Calculation to determine that an immediate repair is not necessary; however, this is inconsistent with PHMSA's position on the formulae's application. Therefore, the operator is not reporting the correct number of immediate repairs. [I.01.b]

Management of Change (MOC)

1. No significant changes identified as of the date of this inspection. However, significant could include if changes in HCA mileage changes by some threshold amount, i.e. 10%. [K.01.b]
2. Reference Section 12.7 on page 67 RMP-06 Rev. 1 dated 10-14-05. Notification to other departments within the company needs to be more clearly defined. [K.02.b]
3. Reference Section 12.13 on page 71 in RMP-06 Rev.1 dated 10-14-05. Suggested some enhanced detail that clearly delineates authority for approving changes. [K.02.c]
4. Currently this is being done via e-mail, but there is no formal procedure in place to ensure consistent results when operating changes are needed as a result of the IM program. [K.02.d]
5. A cross reference to the company engineering standards needs to be developed to ensure equipment being installed as a result of the IM program is commensurate to the operating conditions in which it will be installed. [K.02.e]

Quality Assurance

1. Roles and Responsibilities are described at a high level for each section of the program, but the specific duties and authorities are not defined and Dan agreed with this analysis. [L.01.a]
2. No process in place to verify that third party resources will produce quality results as required by the program. [L.01.d]

3. Not enough detail was included in minimum qualification requirements as listed in the RMP-06 Rev. 1 on various pages. [L.02.d]
4. All of the “should” statements have not been implemented as suggested by the standard. Operator is preparing a white paper as to their position on “should” statements not being implemented. However, they have not prepared this position paper at this time even though the standards are being utilized within the program. [L.03.a,b,c]

Communications Plan

1. This process does not appear to exist in a formalized procedure illustrating all the steps necessary to fulfill this part of the rule requirement, i.e. General Public communication. However, Section 14 of RMP-06 Rev. 1 on page 78 – 80 attempts to fulfill this requirement, but it is in a framework status which at this point would be unacceptable due to the fact that assessments are being performed. [M.01.a]
2. Section 14 of RMP-06 Rev. 1 dated 10/14/05 does not address this rule requirement. PG&E agreed that this was not spelled out in detail how the operator was going to comply with this requirement of addressing CPUC or PHMSA concerns. [M.02.a]
3. Public information should be provided in the prevalent language being used in the area. [M.01.a]